

## **DEPARTMENT OF COMMERCE**

National Institute of Standards and Technology National Voluntary Laboratory Accreditation Program

## **ISSUE DATE:**

May 24, 2013

**NUMBER:** LB-76-2013

LAP: Ionizing Radiation

Dosimetry

## **LAB BULLETIN**

**SUBJECT:** Resumption of Proficiency Testing – Neutron Categories – ANSI N13.11-2009

This bulletin announces the resumption of proficiency testing for the neutron categories of ANSI N13.11-2009, *American National Standard for Dosimetry – Personnel Dosimetry Performance – Criteria for Testing*.

The issues that resulted in suspension of NVLAP proficiency testing for neutron categories have been resolved through a collaborative effort by the U.S. Naval Dosimetry Center, NIST, and Pacific Northwest National Laboratory (PNNL). The efforts and outcome resulting from the collaboration are reported in PNNL-22353, *Inter-Laboratory Comparison of PNNL and NIST Neutron Irradiation Capabilities using D<sub>2</sub>O-moderated <sup>252</sup>Cf and a Commercial Thermoluminescent Dosimeter Provided by the U.S. Naval Dosimetry Center.* A draft report was provided to NVLAP in April 2013, and a final report will be available through the PNNL Publications website at <a href="http://www.pnl.gov/publications/">http://www.pnl.gov/publications/</a>.

Neutron proficiency testing will resume for the radiation subcategories involving  $D_2O$ -moderated  $^{252}Cf$  in the  $3^{rd}$  quarter 2013, which begins July 2013, for all laboratories that are accredited for neutron categories and other laboratories that want to become accredited for neutron categories. Because the neutron dose equivalent quantity has now shifted to the personal dose equivalent, Hp(10), PNNL will provide neutron calibration irradiations for the dosimeter model to allow normalization to the test spectrum. As with previous neutron proficiency testing, such calibrations will be offered simultaneously with the initial round testing.

Laboratories that need more time to perform verification and validation actions before submitting dosimeters for neutron irradiation may resume neutron proficiency testing during 4<sup>th</sup> quarter 2013, which begins October 2013.

This bulletin has also been posted to the NVLAP website at: http://www.nist.gov/nvlap.

Questions concerning the requirements for accreditation of dosimetry laboratories should be directed to Betty Ann Sandoval at 301-975-8446, or <a href="mailto:betty.sandoval@nist.gov">betty.sandoval@nist.gov</a>. Beginning July 1, 2013, questions concerning the requirements for accreditation of dosimetry laboratories should be directed to Dana Leaman at 301-975-4679, or <a href="mailto:dana.leaman@nist.gov">dana.leaman@nist.gov</a>.